

**Project Location:**

Hull, United Kingdom.

**Main Contractor:**

Graham Lagan JV

**Partner Firm (Contractor):**

BAUER Spezialtiefbau

**Project period:**

Feb. – Jun. 2016

**Method Applied, Quantities:**

Approx. 600 Dry Bottom Feed Vibro Displacement and 2700 Top Feed Vibro Replacement Stone Columns to a depth of 12 m and 8 m respectively were installed.

Total linear meters amounted to approx 30,000.

Column diameter in average 1.0 m.

## Technical Requirements:

Provide Ground improvement by installing 1.0 m diameter stone columns to a depth of 8 m to 12 m providing reinforcement and accelerated settlement for a land reclamation behind a new berth at Green Port Hull.

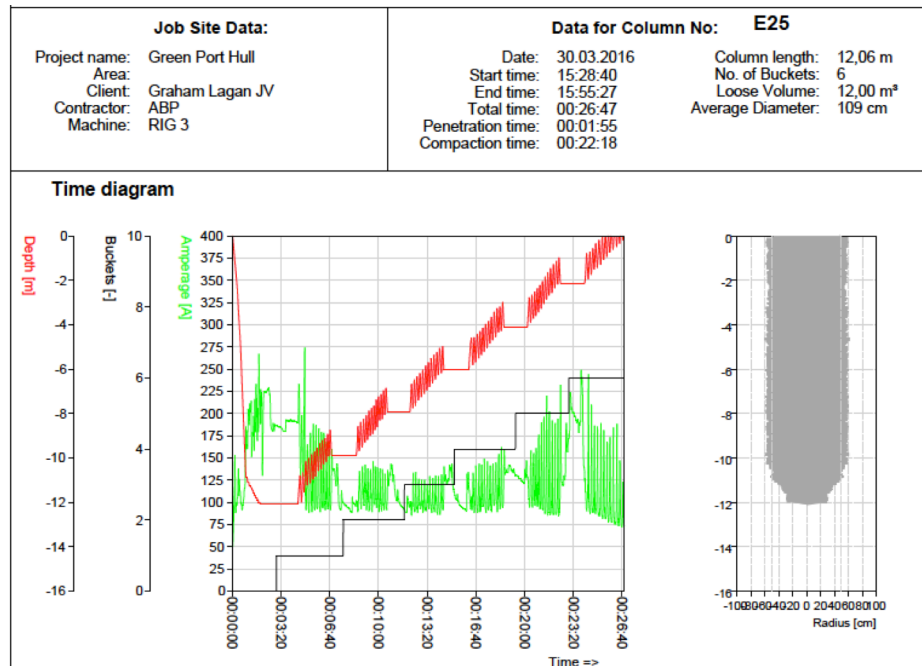


TE1 Top Feed rig (left) and BC1 Bottom Feed rig (right) with B27 vibroflots



## Quality Control Testing:

A superior quality of column installation as per below printout was achieved using the Betterground Operator Guidance System for control of installation parameters, in particular the installed diameter over depth.



Verification testing was by Zone Load Tests.

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